PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

AK Industries, Inc. 2055 Pidco Drive Plymouth, Indiana 46563

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T099-7547-00043

Issued by: Janet G. McCabe, Assistant Commissioner

Office of Air Quality

Expiration Date: April 20, 2006

April 20, 2001

Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1 (22)]

The Permittee owns and operates a stationary fiberglass septic tank manufacturing facility.

Responsible Official: John Sobo, President

Source Address: 2055 Pidco Drive, Plymouth, Indiana 46563 Mailing Address: P.O. Box 640, Plymouth, Indiana 46563

SIC Code: 3999 County Location: Marshall

Source Location Status: Attainment or unclassifiable for all criteria pollutants

Source Status: Minor Source under PSD rules

Major Source under Part 70 rules

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) resin flowcoat booths and one (1) hand layup area, identified as CP1, CP2, CP3, and HL1, respectively, each float coat booth with a maximum design rate of 1 unit/hr, with emissions exhausted to stacks F1, F3, and F4, respectively,
- (b) One (1) filament winding machine, identified as FW4, with a maximum design rate of 4 units/hr.
- (c) Six (6) filament winding mandrels, identified as FWSH1 through FWSH6, each with a maximum desing rate of 1 unit/hr, each with emissions controlled by a dry filter system, with emissions exhausted to stacks F6 through F11, respectively,
- (d) One (1) portable resin spray applicator, identified as CPC4, with emissions exhausted to stacks F6, F7, F8, F9, F10, or F11,
- (e) One (1) gelcoat booth, identified as FCG1, with a maximum design capacity of 0.125 parts/hr, with emissions controlled by a dry filter system and exhausted to stack F12,
- (f) One (1) resin flowcoat booth, identified as FCR1, with a maximum design capacity of 0.125 parts/hr, with emissions exhausted to stack F13,
- (g) One (1) gelcoat booth, identified as G1, with a maximum design capacity of 5.71 units/hr, emissions controlled by a dry filter system and exhausted to stack F5,

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(h) Two (2) hand grinding and blasting booths, identified as CB1 and CB2, with a maximum design capacity of 1.04 tons (parts)/hr each, emissions controlled by baghouse P1, and emissions exhausted to stack P1.

- (i) One (1) pneumatic shot blasting booth, identified as CB2, with a maximum design capacity of 1000 lb/hr, emissions controlled by baghouse P1, and emissions exhausted to stack P1.
- (j) One (1) fitting area, identified as FT1, and
- (k) One (1) paint booth, identified as PB1, with a maximum design capacity of 6 lids/hr, with emissions sometimes controlled by a dry filter system (which is not required to meet compliance) and exhausted to stack F2.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) The following equipment related to the manufacturing activities not resulting in the emission of HAPs [326 IAC 6-3-2]:
 - (1) One hand tooling and finishing area,
 - (2) Two pulverizor units,
 - (3) One regrind unit,
 - (4) Two metal inert gas welding units,
 - (5) One plasma cutting unit,
 - (6) One metal cutting unit,
 - (7) One metal sanding unit,
 - (8) One metal drilling unit, and
 - (9) One fiberglass tube cutter.
- (b) The following equipment related to the manufacturing activities not resulting in the emission of VOCs [326 IAC 8-3].

Degreasing operations that do not exceed 145 gallons per 12 months.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

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SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

(c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590 AK Industries, Inc.

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(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification:
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

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(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance Section), or

Telephone Number: 317-233-5674 (ask for Compliance Section)

Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

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The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

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B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance:
 - The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

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(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
 - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

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(1) That this permit contains a material mistake.

- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
 - (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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(c) Right to Operate After Application for Renewal [326 IAC 2-7-3] If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)] If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

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(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
 The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

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B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy any records that must be kept under the conditions of this permit;
- (c) Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

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B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 PSD Minor Source VOC Limit [326 IAC 6-3-2(c)] [40 CFR 52.21]

The source VOC potential to emit (PTE) shall be limited to 249 tons per twelve (12) consecutive month period. Compliance with the limit of this condition and the conditions of Section D will make the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, not applicable in this case.

C.2 PSD Minor Source PM Limit [326 IAC 2-2] [40 CFR 52.21]

The source particulate matter (PM) emissions shall be limited to 249 tons per year. Section D of this permit contains independently enforceable provisions to satisfy this requirement. Compliance with the limit of this condition and the conditions of Section D will make the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, not applicable in this case.

C.3 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.6 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.7 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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C.8 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.9 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.10 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC
14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements
are applicable for any removal or disturbance of RACM greater than three (3) linear feet
on pipes or three (3) square feet on any other facility components or a total of at least
0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator,
prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to
thoroughly inspect the affected portion of the facility for the presence of asbestos. The
requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.11 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.12 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

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C.13 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

- C.15 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
 - (c) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.
 - (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

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(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

within 180 days from the date on which this source commences operation.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;

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(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

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C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this
 permit, the Permittee shall take appropriate response actions. The Permittee shall
 submit a description of these response actions to IDEM, OAQ, within thirty (30) days of
 receipt of the test results. The Permittee shall take appropriate action to minimize
 excess emissions from the affected facility while the response actions are being
 implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

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(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

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Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161. (c)

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SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Fiberglass Parts Manufacturing Operation

- (a) One (1) hand layup area, identified as HL1, and three (3) resin flowcoat booths, identified as CP1, CP2, CP3, respectively, each float coat booth with a maximum design rate of 1 unit/hr, with emissions exhausted to stacks F1, F3, and F4, respectively,
- (b) One (1) gelcoat booth, identified as G1, with a maximum design rate of 5.71 units/hr, with emissions controlled by a dry filter system, and emissions exhausted to stack F5.
- (c) One (1) filament winding machine, identified as FW4, with a maximum design rate of 4 units/hr,
- (d) Six (6) filament winding mandrels, identified as FWSH1 through FWSH6, each with a maximum design rate of 1 unit/hr, each with emissions controlled by a dry filter system, with emissions exhausted to stacks F6 through F11, respectively,
- (e) One (1) portable resin spray applicator, identified as CPC4, with emissions exhausted to stacks F6, F7, F8, F9, F10, or F11,
- (f) One (1) hand grinding and blasting booth, identified as CB1, with emissions controlled by baghouse P1, with emissions exhausted to stack P1,
- (g) One (1) pneumatic shot blasting booth, identified as CB2, with emissions controlled by baghouse P1, and emissions exhausted to stack P1,
- (h) One (1) gelcoat booth, identified as FCG1, with a maximum design capacity of 0.125 parts/hr, with emissions controlled by a dry filter system and exhausted to stack F12, and
- (i) One (1) resin flowcoat booth, identified as FCR1, with a maximum design rate of 0.125 parts/hr, with emissions exhausted to stack F13.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to CP-099-10311-00043, issued on April 15, 1999, the fiberglass parts manufacturing operation, including units HL1, CP1-CP3, G1, FW4, FWSH1-FWSH6, CPC4, CB1, CB2, FCG1, and FCR1, in conjunction with the paint booth, PB1, shall use less than 250 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period. The usage limit for this facility and the paint booth usage limit (Condition D.2.1) are required to limit the potential to emit of VOC to less than 250 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the fiberglass parts manufacturing operation is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this new source shall be satisfied by the requirements of 325 IAC 2-4.1 (New Source Toxics Control) specified in Condition D.1.3.

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D.1.3 New Source Toxics Control [326 IAC 2-4.1]

Pursuant to the MACT determination under 326 IAC 2-4.1, operating conditions for the fiberglass parts manufacturing operation shall be the following:

- (a) Use of resins and gel coats shall be limited such that the potential to emit (PTE) volatile organic HAP from resins and gel coats only shall be less than 100 tons per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: Unified Emission Factors for Open Molding of Composites, April 1999, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
- (b) Resins and gel coats used, including filled resins and tooling resins and gel coats, shall be limited to maximum monomer contents of 35 percent (35%) by weight for resins, 37 percent (37%) by weight for gel coats or their equivalent on an emissions mass basis. Monomer contents shall be calculated on a neat basis, i.e., excluding any filler. Compliance with these monomer content limits shall be demonstrated on a monthly basis.

The use of resins with monomer contents lower than 35%, gel coats with monomer contents lower than 37%, and/or additional emission reduction techniques approved by IDEM, OAQ, may be used to offset the use of resins with monomer contents higher than 35%, and/or gel coats with monomer contents higher than 37%. Examples of other techniques include, but are not limited to, lower monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging, controlled spraying, or installing a control device with an overall reduction efficiency of 95%. This is allowed to meet the monomer content limits for resins and gel coats, and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from >35% resin or >37% gel coat) - (Emissions from 35% resin or 37% gel coat) # (Emissions from 35% resin or 37% gel coat) - (Emissions from <35% resin, <37% gel coat, and/or other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (Monomer emission factor for resin or gel coat used, %);

EF, Monomer emission factor = emission factor, expressed as % styrene emitted per weight of resin applied, which is indicated by the monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

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(c) Flow coaters, a type of non-spray application technology of a design and specifications to be approved by IDEM, OAQ, shall be used in the following manner:

- (1) To apply 50% of all neat resins within 6 months of commencement of operation.
- (2) To apply 100% of all neat resins used within 1 year of commencement of operation.

If after 1 year of operation it is not possible to apply a portion of neat resins with flow coaters, equivalent emissions reductions must be obtained via use of other techniques, such as those listed in Condition D.1.2(b) above, elsewhere in the process.

(d) Optimized spray techniques according to a manner approved by IDEM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) Cleanup solvent containers used to transport solvent from drums to work stations shall be closed containers having soft gasketed spring-loaded closures.
 - (3) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (4) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (5) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete. The waste solvent shall be handled in such a manner that evaporation is minimized, and managed in accordance with applicable solid or hazardous waste requirements.
 - (6) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to CP-099-10311-00043, issued on April 15, 1999 and pursuant to 326 IAC 6-3-2, the PM from the units listed in the facility description, except for FT1 and FW4, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$

where E = rate of emission in pounds per hour; and

P = process weight rate in tons per hour

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Operation	Process Rate (ton/hr)	PM Limit (lb/hr)
CP1/HL1	0.24	1.58
CP2	0.24	1.58
CP3	0.24	1.58
FW4	0.05608	0.60
FWSH1-3/CPC4	0.2648	1.68
FWSH4	0.2648	1.68
FWSH5	0.2648	1.68
FWSH6	0.2648	1.68
CB1/CB2	2.08	6.70
CB2	0.5	2.58
G1	0.03155	0.41
FCG1	0.02155	0.31
FCR1	0.2	1.39

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for all of the facility's emissions units and control devices except FW4, HL1, and FT1.

Compliance Determination Requirements

D.1.6 Testing Requirements [326 IAC 3-6]

The Permittee is not required to test these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if these facilities are in compliance. If testing is required by IDEM, compliance with the volatile organic compound limit specified in Conditions D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C -Performance Testing.

D.1.7 Volatile Organic Compounds (VOC)

Compliance with the VOC and monomer content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the manufacturer.

D.1.8 VOC Emissions

Compliance with Condition D.1.1 and D.1.3(a) shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound and volatile organic HAP usage for the twelve (12) month period.

D.1.9 Particulate Matter (PM)

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Pursuant to CP 099-10311-00043 issued on April 15, 1999, the dry filters, and baghouses for particulate matter control shall be in operation at all times when the associated fiberglass facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.1.10 Monitoring

- (a) The Permittee shall implement an operator-training program.
 - (1) All operators that perform gel coat spray operations, resin spray operations, paint spray operations, chopping operations or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit reissuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.11 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the processes (a) through (i) listed in the facility description at the beginning of Section D.1, at least once weekly when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.12 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the hand grinding area (CB1), and the shot blast area (CB2) when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.13 Broken or Failed Bag Detection

In the event that bag failure has been observed:

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(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements

D.1.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.3 and D.1.8, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC volatile organic HAP emission limit established in Conditions D.1.1 and D.1.3, respectively.
 - (1) The usage by weight and monomer content of each resin and gel coat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) A log of the dates of use;
 - (3) Method of application and other emission reduction techniques for each resin and gel coat used;
 - (4) The calculated total volatile organic HAP emissions from resin and gel coat use for each month.
- (b) To document compliance with Conditions D.1.3 and D.1.10, the Permittee shall maintain a copy of the operator training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.15 Record Keeping Requirements

(a) To document compliance with Condition D.1.11, the Permittee shall maintain the following:

Weekly records of the following operational parameters during normal operation when venting to the atmosphere:

- (1) Inlet and outlet differential static pressure; and
- (2) Cleaning cycle operation.

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(b) To document compliance with Condition D.1.12, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12 and the dates the vents are redirected.

- (c) To document compliance with Condition D.1.10, the Permittee shall maintain a copy of the operator training program, training records, and these additional inspections prescribed by the Preventive Maintenance Plan.
- (d) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.16 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 and D.1.3 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.2 PAINT BOOTH OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: One (1) paint booth, identified as PB1, with a maximum design rate of 6 lids/hr, emissions controlled by a dry filter system, and emissions exhausted to stack F2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to CP 099-10311-00043, the input volatile organic compounds (VOC) including clean up solvent, minus the VOC solvent shipped out, delivered to the applicators of Paint Booth PB1 shall be limited to 147 tons per twelve (12) consecutive month period. This usage limit and the usage limit for the fiberglass parts manufacturing process (Condition D.1.1) are required to emit the potential to emit of VOC to less than 250 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration and 40 CFR 52.21 not applicable.

D.2.2 Particulate Matter (PM) Overspray [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from the Paint Booth PB1 shall be limited by the following: Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E =rate of emission in lb/hr, and P =process weight rate in ton/hr

D.2.3 Miscellaneous Metal Coating [326 IAC 8-2-9]

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water, for extreme performance coatings.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.2.4 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control device.

Compliance Determination Requirements

D.2.5 Testing Requirements [326 IAC 3-6]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the volatile organic compound limit specified in Conditions D.2.1 and D.2.3 shall be determined by a performance test conducted in accordance with Section C -Performance Testing.

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D.2.6 Particulate Matter (PM)

The dry filters for particulate matter overspray control shall be properly placed and maintained to ensure integrity and particulate loading of the filters at all times when paint booth PB1 is in operation.

Compliance Monitoring Requirements

D.2.7 Monitoring

- (a) The Permittee shall implement an operator-training program.
 - (1) All operators that perform gel coat spray operations, resin spray operations, paint spray operations, chopping operations or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit reissuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements

D.2.8 Record Keeping Requirements

- (a) To document compliance with Condition D.2.1 and D.2.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1 and D.2.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The volume weighted VOC content of the coatings used for each month;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.

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(b) To document compliance with Condition D.2.2 and D.2.7, the Permittee shall maintain a copy of the operator training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: hand tooling and finishing area, two pulverizor units, regrind unit, metal inert gas welding units, plasma cutting unit, metal cutting unit, metal sanding unit, metal drilling unit, and fiberglass tube cutter.
- (b) The following equipment related to the manufacturing activities not resulting in the emission of VOCs [326 IAC 8-3].

Degreasing operations that do not exceed 145 gallons per 12 months.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from the hand tooling and finishing area, two pulverizor units, regrind unit, metal inert gas welding units, plasma cutting unit, metal cutting unit, metal sanding unit, metal drilling unit, and fiberglass tube cutter shall not exceed allowable PM emission rate based on the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.3.2 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.3 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

AK Industries, Inc.

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(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

- (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
- (B) The solvent is agitated; or
- (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

AK Industries, Inc. Page 40 of 47 Plymouth, Indiana OP No. T099-7547-00043

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: AK Industries, Inc.

2055 Pidco Drive, Plymouth, Indiana 46563 2055 Pidco Drive, Plymouth, Indiana 46563 Source Address: Mailing Address:

	70 Permit No.:	T099-7547-00043
	This certification	n shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.
	Please check wha	at document is being certified:
9	Annual Complian	ce Certification Letter
9	Test Result (spec	ify)
9	Report (specify)	
9	Notification (spec	ify)
9	Other (specify)	
		on information and belief formed after reasonable inquiry, the statements and ument are true, accurate, and complete.
Sig	nature:	
Pri	nted Name:	
Titl	e/Position:	
Da	te:	

AK Industries, Inc. Page 41 of 47 Plymouth, Indiana OP No. T099-7547-00043

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

AIR COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: AK Industries, Inc.

Source Address: 2055 Pidco Drive, Plymouth, Indiana 46563 Mailing Address: 2055 Pidco Drive, Plymouth, Indiana 46563

Part 70 Permit No.: T099-7547-00043

This form consists of 2 page	This forn	consists	of 2	page
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9 This is an emergency as defined in 326 IAC 2-7-1(12)

C The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days

The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-

7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Control Equipment.
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

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If any of the following are not applicable, mark N/A

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Date/Time Emergency started:				
Date/Time Emergency was corrected:				
Was the facility being properly operated at the time of the emergency? Y N Describe:				
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:				
Estimated amount of pollutant(s) emitted during emergency:				
Describe the steps taken to mitigate the problem:				
Describe the corrective actions/response steps taken:				
Describe the measures taken to minimize emissions:				
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:				
Form Completed by:				
Title / Position:				
Date:				
Phone:				

A certification is not required for this report.

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Ad Mailing Ad Part 70 Pe Facility: Parameter Limit: The potent	Parameter: Usage of all gelcoats, resins, and adhesives from the fiberglass layup operation								
Facility	CP1- CP3/HLI	FW4	FWSH1- 3/CPC4	FWSH4	FWSH5	FWSH6	G1	FCG1	FCR1
CFA EF	3.6	6.6	7.0	6.6	6.6	6.6	18.8	14.7	3.6
			YE	AR:					
		Col	umn 1		Column	2	Colu	mn 1 + Co	lumn 2
Мо	nth	This	Month	Previous 11 Months 12 Mo		2 Month To	otal		
Mor	nth 1								
Mor	nth 2								
Mor	nth 3								

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION**

	Part 70	Quarterly Report				
Source Address: 2 Mailing Address: 2 Part 70 Permit No.: Facility:	AK Industries, Inc. 2055 Pidco Drive, Plymouth, Indiana 46563 2055 Pidco Drive, Plymouth, Indiana 46563 T099-7547-00043					
	Jsage of all coatings ar ∟ess than 147 tons inpu	nd solvents from PB1 ut VOC per 12 consecutive mo	onth period			
	YEAF	₹:				
	Column 1	Column 2	Column 1 + Column 2			
Month	This Month	Previous 11 Months	12 Month Total			
Month 1						
Month 2						
Month 3						
9 [Subm Title	/ Position:	this quarter.				

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY **COMPLIANCE DATA SECTION**

Part 70 Quarterly Report

Source mame:	AK industries, inc.
Source Address:	2055 Pidco Drive Plymouth Indiana

46563 2055 Pidco Drive, Plymouth, Indiana 46563 Mailing Address:

Part 70 Permit No.: T099-7547-00043 Facility: **Entire Source**

Parameter: Usage of all coatings and solvents from units HL1, CP1-CP3, G1, FW4, FWSH1-

FWSH6, CPC4, CB1, CB2, FCG1, FCR1, and PB1

Limit: Less than 250 tons input VOC per 12 consecutive month period

YEAR:	

	Column 1	Column 2	Column 1 + Column 2
Month	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter. Deviation has been reported on:

Submitted by: Title / Position: Signature: Date: Phone:

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: AK Industries, Inc. Source Address: 2055 Pidco Drive, Plymouth, Indiana 46563 Mailing Address: 2055 Pidco Drive, Plymouth, Indiana 46563 Part 70 Permit No.: T099-7547-00043 Months: _____ to _____ Year: _____ Page 1 of 2 This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". 9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. 9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD Permit Requirement (specify permit condition #) **Date of Deviation: Duration of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken: Permit Requirement (specify permit condition #) **Duration of Deviation: Date of Deviation: Number of Deviations: Probable Cause of Deviation:** Response Steps Taken:

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	1 aye 2 01 2					
Permit Requirement (specify permit condition #)						
Date of Deviation:	Duration of Deviation:					
Number of Deviations:						
Probable Cause of Deviation:						
Response Steps Taken:						
Permit Requirement (specify permit condition #)						
Date of Deviation:	Duration of Deviation:					
Number of Deviations:						
Probable Cause of Deviation:						
Response Steps Taken:						
Permit Requirement (specify permit condition #)						
Date of Deviation: Duration of Deviation:						
Number of Deviations:						
Probable Cause of Deviation:						
Response Steps Taken:						
Form Completed By:						
Title/Position:						
Date:						
Phone:						

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: AK Industries, Inc.

Source Location: 2055 Pidco Dr., Plymouth, Indiana 46563

County: Marshall SIC Code: 3999

Operation Permit No.: T099-7547-00043

Permit Reviewer: ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from AK Industries, Inc. relating to the operation of fiberglass parts fabrication.

Permitted Emission Units and Pollution Control Equipment

This stationary source consists of the following permitted emission units and pollution control devices:

- (a) Three (3) resin flowcoat booths and one (1) hand layup area, identified as CP1, CP2, CP3, and HL1, respectively, each float coat booth with a maximum design rate of 1 unit/hr, with emissions exhausted to stacks F1, F3, and F4, respectively,
- (b) One (1) filament winding machine, identified as FW4, with a maximum design rate of 4 units/hr,
- (c) Six (6) filament winding mandrels, identified as FWSH1 through FWSH6, each with a maximum desing rate of 1 unit/hr, each with emissions controlled by a dry filter system, with emissions exhausted to stacks F6 through F11, respectively,
- (d) One (1) portable resin spray applicator, identified as CPC4, with emissions exhausted to stacks F6, F7, F8, F9, F10, or F11,
- (e) One (1) gelcoat booth, identified as FCG1, with a maximum design capacity of 0.125 parts/hr, with emissions controlled by a dry filter system and exhausted to stack F12,
- (f) One (1) resin flowcoat booth, identified as FCR1, with a maximum design capacity of 0.125 parts/hr, with emissions exhausted to stack F13,
- (g) One (1) gelcoat booth, identified as G1, with a maximum design capacity of 5.71 units/hr, emissions controlled by a dry filter system and exhausted to stack F5,
- (h) Two (2) hand grinding and blasting booths, identified as CB1 and CB2, with a maximum design capacity of 1.04 tons (parts)/hr each, emissions controlled by baghouse P1, and emissions exhausted to stack P1,

AK Industries, Inc. Page 2 of 12 T099-7547-00043 Plymouth, Indiana

Permit Reviewer: ERG/BS

One (1) pneumatic shot blasting booth, identified as CB2, with a maximum design (i) capacity of 1000 lb/hr, emissions controlled by baghouse P1, and emissions exhausted to stack P1,

- (j) One (1) fitting area, identified as FT1.
- (k) One (1) paint booth, identified as PB1, with a maximum design capacity of 6 lids/hr, with emissions sometimes controlled by a dry filter system (which is not required to meet compliance) and exhausted to stack F2,

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- Six (6) natural gas-fired rotational curing ovens, identified as R01, R02, R03, R04, R05, (a) and R06, with maximum capacities less than ten million (10.000.000) MMBtu/hr.
- One (1) hand tooling and finishing area, identified as HT1, (b)
- (c) Two (2) pulverizor units, identified as RP1,
- (d) One (1) regrind unit, identified as RP2,
- Two (2) metal inert gas welding units, identified as MW 15 and RMW 20, respectively, (e)
- (f) One (1) plasma cutting unit, identified as RMC 19,
- (g) One (1) metal cutting unit, identified as MC 14,
- (h) One (1) metal sanding unit, identified as MS 17,
- (i) One (1) metal drilling unit, identified as MD16,
- Three (3) natural gas-fired air make-up units, identified as AW1, AW2, and AW3, with (j) heat capacities of 2.0, 3.0, and 3.0 MMBtu/hr, respectively,
- (k) Four (4) natural gas-fired office furnaces, identified as H1, H2, RH1, and RH2, with heat capacities of 0.15, 0.15, 0.15, and 0.25 MMBtu/hr, respectively,
- (l) Two (2) fiberglass resin storage tanks, identified as T1 and T2, with capacities of 5000 gallons each,
- (m) One (1) fiberglass tube cutter, identified as TC1,
- (n) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids,
- Degreasing operations that do not exceed 145 gallons per 12 months, (o)
- Replacement or repair of electrostatic precipitators, bags in baghouses and filters in (p) other air filtration equipment.
- (q) Paved and unpaved roads and parking lots with public access.

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

- (r) On-site fire and emergency response training approved by the department, and
- (s) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (a) CP 099-2776-00043, issued on 12/9/94; and
- (b) CP 099-4597-00043, issued on 10/31/95; and
- (c) CP 099-10311-00043, issued on 4/15/99.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

(a) CP-099-10311-00043 issued on April 15, 1999:

Condition D.2.1 states that the input volatile organic compounds delivered to the Paint Booth PB1 shall be limited to 147 tons per year "based on a 12 month rolling total."

This limit is now based on a "twelve (12) month consecutive period." This language was changed to be consistent with current standard permit condition language. In addition, "PSD Minor Limit" and the rule cite for 40 CFR 5221 was added to the condition heading, and the following sentence was added to Condition D.2.1:

This usage limit and the usage limit for the fiberglass parts manufacturing process (Condition D.1.1) are required to emit the potential to emit of VOC to less than 250 tons per 12 consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration and 40 CFR 52.21 not applicable.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 12, 1996.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations see Appendix A, pages 1 through 6.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	630.5
PM-10	630.5
SO ₂	-
VOC	500.8
СО	-
NO _x	-

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)	
Styrene	greater than 250	
Ethylbenzene	0.44	
MEK	1.2	
Xylene	2.44	
TOTAL	greater than 250	

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1999 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	-
PM-10	-
SO ₂	-
VOC	20
CO	-
NO _x	-
HAP (specify)	-

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

Potential to Emit After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 operating permit.

	Potential to Emit (tons per year)									
Process/facility	PM	PM-10	SO ₂	VOC*	CO	NO _X	HAPs*			
CP1-CP3/HL1	20.7	20.7	-	<250	-	-	<100			
FW4	2.6	2.6	-	<250	-	-	<100			
FWSH1-3/CPC4	7.4	7.4	-	<250	-	-	<100			
FWSH4-6	22.1	22.1	-	<250	-	-	<100			
FCG1	1.4	1.4	-	<250	-	-	<100			
FCR1	6.1	6.1	-	<250	-	-	<100			
PB1	32.4	32.4	-	<147	-	-	<100			
G1	1.8	1.8	-	<250	-	-	<100			
CB1/CB2	29.3	29.3	-	-	-	-	-			
CB2	11.3	11.3	-	-	-	-	-			
FT1	-	-	-	-	-	-	<100			
Total Emissions	135.1	135.1	-	<250	-	-	<100			

^{*} The "<100" indicates that the aggregate potential HAP emissions of these units are limited to less than 100 tpy. Likewise the <250 indicates a source wide VOC limit. Process PB1 is specifically limited to less than 147 tons per year.

County Attainment Status

The source is located in Marshall County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Marshall County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source, including the degreaser NESHAP, (326 IAC 14 and 40 CFR Part 63, Subpart T. The insignificant degreaser does not use a halogenated HAP solvent and therefore Subpart T does not apply.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10 and VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Fiberglass Parts Manufacturing Operation

326 IAC 6-3-2 (Process Operations)

Pursuant to CP 099-10311-00043, issued on 4-15-99, the particulate matter (PM) from the equipment listed below shall be limited by the following:

	Process Rate (ton/hr)	PM Limit (lb/hr)
CP1/HL1	0.24	1.58
CP2	0.24	1.58
CP3	0.24	1.58
FW4	0.05608	0.60
FWSH1-3/CPC4	0.2648	1.68
FWSH4	0.2648	1.68
FWSH5	0.2648	1.68
FWSH6	0.2648	1.68
CB1/CB2	2.08	6.70
CB2	0.5	2.58
G1	0.03155	0.41
FCG1	0.02155	0.31
FCR1	0.2	1.39

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$
 where $E =$ rate of emission in pounds per hour and $P =$ process weight rate in tons per hour

The respective dry filters and baghouses listed shall be in operation at all times during the operation of the applicable particulate matter (PM) source generating equipment, in order to comply with this limit.

326 IAC 8-1-6 (Volatile Organic Compounds)

Pursuant to 326 IAC 8-1-6, the fiberglass parts manufacturing operation is subject to the requirements of 326 IAC 8-1-6, which requires that the Best Available Control Technology (BACT) be used to control VOC emissions. BACT for this source shall be satisfied by the requirements of 326 IAC 2-4.1 (New Source Toxics Control).

326 IAC 2-4.1 (New Source Toxics Control)

Pursuant to the MACT determination under 326 IAC 2-4.1, operating conditions for the fiberglass parts manufacturing operation shall be the following:

- (a) Use of resins and gel coats shall be limited such that the potential to emit (PTE) volatile organic HAP from resins and gel coats only shall be less than 100 tons per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

- (2) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "CFA Emission Models for the Reinforced Plastics Industries", Composites Fabricators Association, February 28, 1998, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
- (b) Resins and gel coats used, including filled resins and tooling resins and gel coats, shall be limited to maximum monomer contents of 35 percent (35%) by weight for resins,
 37 percent (37%) by weight for gel coats or their equivalent on an emissions mass basis.
 Monomer contents shall be calculated on a neat basis, i.e., excluding any filler.
 Compliance with these monomer content limits shall be demonstrated on a monthly basis.

The use of resins with monomer contents lower than 35%, gel coats with monomer contents lower than 37%, and/or additional emission reduction techniques approved by IDEM, OAQ, may be used to offset the use of resins with monomer contents higher than 35%, and/or gel coats with monomer contents higher than 37%. Examples of other techniques include, but are not limited to, lower monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging, controlled spraying, or installing a control device with an overall reduction efficiency of 95%. This is allowed to meet the monomer content limits for resins and gel coats, and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from >35% resin or >37% gel coat) - (Emissions from 35% resin or 37% gel coat) # (Emissions from 35% resin or 37% gel coat) - (Emissions from <35% resin, <37% gel coat, and/or other emission reduction techniques).

Where:

Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (Monomer emission factor for resin or gel coat used, %);

EF, Monomer emission factor = emission factor, expressed as % styrene emitted per weight of resin applied, which is indicated by the monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

- (c) Flow coaters, a type of non-spray application technology of a design and specifications to be approved by IDEM, OAQ, shall be used in the following manner:
 - (1) To apply 50% of all neat resins within 6 months of commencement of operation.
 - (2) To apply 100% of all neat resins used within 1 year of commencement of operation.

If after 1 year of operation it is not possible to apply a portion of neat resins with flow coaters, equivalent emissions reductions must be obtained via use of other techniques, such as those listed in Condition b above, elsewhere in the process.

(d) Optimized spray techniques according to a manner approved by IDEM shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

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HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) Cleanup solvent containers used to transport solvent from drums to work stations shall be closed containers having soft gasketed spring-loaded closures.
 - (3) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
 - (4) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
 - (5) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete. The waste solvent shall be handled in such a manner that evaporation is minimized, and managed in accordance with applicable solid or hazardous waste requirements.
 - (6) Storage containers used to store VOC- and/or HAP- containing materials shall be kept covered when not in use.

State Rule Applicability - Paint Booth

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) from the Paint Booth PB1 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P
$$^{0.67}$$
 where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

	Process Rate (ton/hr)	PM Limit (lb/hr)		
PB1	2.4153	7.40		

The dry filters shall be in operation at all times paint booth PB1 is in operation in order to comply with this limit.

326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicator at the paint booth when painting the metal septic tank lids shall be limited to 3.5 pounds of VOCs per gallon of coating less water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the paint booth is in compliance with this requirement.

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AK Industries, Inc. Plymouth, Indiana Permit Reviewer: ERG/BS

State Rule Applicability - Specifically Regulated Insignificant Activities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from hand tooling and finishing area, pulverizor unit, regrind unit, metal inert gas welding units, plasma cutting unit, metal cutting unit, metal sanding unit, metal drilling unit, and fiberglass tube cutter shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2. This rule requires that the cleaner be equipped with a cover and a facility for draining cleaned parts as well as that waste solvent be stored only in covered containers.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

The degreasing operations are subject to the requirements of 326 IAC 8-3-5(a). This rule requires that the owner or operator of a cold cleaner degreaser facility shall ensure that the degreaser is equipped with a cover that must be designed so that it can be easily operated with one (1) hand if certain conditions exist. The degreaser must be equipped with a facility for draining cleaned articles.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

- 1. The fiberglass parts manufacturing operation has applicable compliance monitoring conditions as specified below:
 - (a) The Permittee shall implement an operator-training program.
 - (1) All operators that perform gel coat spray operations, resin spray operations, chopping operations or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit reissuance. All new operators shall be trained upon hiring or transfer.

- (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
- (3) All operators shall be given refresher training annually.
- (b) Compliance is achieved by the use of record keeping of the VOCs used and by the implementation of a Preventative Maintenance Plan.
- 2. The paint booth has applicable compliance monitoring conditions as specified below.
 - (a) The Permittee shall implement an operator-training program.
 - (1) All operators that perform paint spray operations or booth maintenance shall be trained in the proper set-up and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit reissuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, filter inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within 1 hour for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
 - (b) Compliance is achieved by the use of record keeping of the VOCs used and by the implementation of a Preventative Maintenance Plan.

These monitoring conditions are necessary to ensure compliance with 326 IAC 6-3 (Process Operations) and 326 IAC 8-1-6, and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the 1990 Clean Air Act. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act.
- (b) See attached calculations for detailed air toxic calculations (See Appendix A page 1).

Conclusion

The operation of this fiberglass parts manufacturing facility shall be subject to the conditions of the attached proposed Part 70 Permit No. T099-7547-00043.

Indiana Department of Environmental Management Office of Air Quality

Addendum to a Technical Support Document for a Title V Part 70 Operating Permit

Source Name: AK Industries

Source Location: 2055 Pidco Drive, Plymouth, Indiana 46563

County: Marshall SIC Code: 3999

Operation Permit No.: T-099-7547-00043

Permit Reviewer: ERG/BS

On February 9, 2001, the Office of Air Quality (OAQ) had a notice published in the Plymouth Pilot News, Plymouth, Indiana, stating that AK Industries had applied for a Title V Part 70 Operating Permit to operate a stationary fiberglass parts facility that manufacturers fiberglass tanks and metal tank lids. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted).

Section D

1. OAQ has made the following typographical and grammatical corrections:

D.1.6 Testing Requirements [326 IAC 3-6]

The Permittee is not required to test this facility these facilities by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is these facilities are in compliance. If testing is required by IDEM, compliance with the volatile organic compound limit specified in Conditions **D.1.1** and **D.1.2** shall be determined by a performance test conducted in accordance with Section C -Performance Testing.

D.2.1 Volatile Organic Compounds (VOC) PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Purusuant to CP 099-10311-00043, the input volatile organic compounds (VOC) including clean up solvent, minus the VOC solvent shipped out, delivered to the applicators of Paint Booth PB1 shall be limited to 147 tons per twelve (12) consecutive month period. This usage limit and the usage limit for the fiberglass parts manufacturing process (Condition D.1.1) are required to emit the potential to emit of VOC to less than 250 tons per **twelve** (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration and 40 CFR 52.21 not applicable.

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Mohler Technology, Inc. Boonville, Indiana Permit Reviewer: ERG/KH

D.2.5 Testing Requirements [326 IAC 3-6]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the volatile organic compound limit specified in Conditions D.2.2-D.2.1 and D.2.3 shall be determined by a performance test conducted in accordance with Section C -Performance Testing.

D.1.15 Record Keeping Requirements

(a) To document compliance with Conditions D.1.9 and D.1.11, the Permittee shall maintain the following:

Weekly records of the following operational parameters during normal operation when venting to the atmosphere:

- (1) Inlet and outlet differential static pressure; and
- (2) Cleaning cycle operation.
- (b) To document compliance with Condition D.1.9 D.1.12, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12 and the dates the vents are redirected.
- (c) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.
- OAQ has noted that the name of the reference from which applicable styrene emission factors should be taken, for use in the determination of HAP emissions, has changed. The "CFA Emission Models for the Reinforced Plastics Industries, Composites Fabricators Association, February 28,1998" has been changed as the result of an update that was completed in 1999. This update has no effect on the source's emissions. Changes to the permit as a result of this comment are as follows:

D.1.3 New Source Toxics Control [326 IAC 2-4.1]

Pursuant to the MACT determination under 326 IAC 2-4.1, operating conditions for the fiberglass parts manufacturing operation shall be the following:

- (a) Use of resins and gel coats shall be limited such that the potential to emit (PTE) volatile organic HAP from resins and gel coats only shall be less than 100 tons per twelve (12) consecutive months. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, monomer content, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.

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Mohler Technology, Inc. Boonville, Indiana Permit Reviewer: ERG/KH

- Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "CFA Emission Models for the Reinforced Plastics Industries", Composites Fabricators Association, February 28, 1998 Unified Emission Factors for Open Molding of Composites, April 1999, and shall not exceed 32.3% styrene emitted per weight of gel coat applied and 17.7% styrene emitted per weight of resin applied. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene shall be considered as styrene on an equivalent weight basis.
- 3. OAQ has decided to require that records be kept of the operator training program mandated by Condition D.1.10(a). Condition D.1.10(a) is a standard requirement that assures proper set-up, maintenance and control of the particulate control system. Changes to the permit as a result of this comment are as follows:

D.1.15 Record Keeping Requirements

(a) To document compliance with Conditions D.1.9 and D.1.11, the Permittee shall maintain the following:

Weekly records of the following operational parameters during normal operation when venting to the atmosphere:

- (1) Inlet and outlet differential static pressure; and
- (2) Cleaning cycle operation.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.12 and the dates the vents are redirected.
- (c) To document compliance with Condition D.1.10, the Permittee shall maintain a copy of the operator training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (d)(e) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Appendix A: Emissions Calculations HAP

From Fiberglass Manufacturing operations

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr., Plymouth, IN 46563

Part 70 permit No: 099-7547-00043

Reviewer: ERG/BS Date: 08.29.00

Uncontrolled Potential HAP (Styrene) Emissions (calculated by ERG using CFA factors)

	resin use rate	%wt monomer	EF *	potential HAP	potential HAP
Unit(s) ID	(lb/hr)	(% Styrene)	(%)	(lb/hr)	(tons/yr)
CP1 - CP3/HL1**	720	35.0%	3.6%	25.92	113.53
FW4	111.32	34.5%	6.6%	7.35	32.18
FWSH1-3/CPC4	212.8	35.0%	7.0%	14.90	65.24
FWSH4-6	638.4	35.0%	6.6%	42.13	184.55
G1	63.1	36.8%	18.8%	11.86	51.96
FCG1	43.1	32.7%	14.7%	6.34	27.75
FCR1	25	35.0%	3.6%	0.90	3.94
			total	109.40	479.15

^{*} Emission factor taken from CFA Emission Model

METHODOLOGY

Potential HAP Pounds per Hour =Resin use rate (lb/hr) * Emission factor (%).

Potential HAP Tons per Year = Potential HAP lbs per hour* (8760 hr/yr) * (1 ton / 2000 lbs)

^{**} HL1 is used with CP1, CP2, and CP3; 3 identical guns with individual resin use rates of 240 lb/hr

Appendix A: Emissions Calculations VOC (non HAP)

From Fiberglass Manufacturing operations

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr.,Plymouth, IN 46563

Part 70 permit No: 099-7547-00043

Reviewer: ERG/BS Date: 08.29.00

Uncontrolled Potential VOC (non HAP) Emissions (calculated by ERG)

	release agent use rate	cleaner use rate	release agent VOC %	cleaner VOC %*	VOC emissions	VOC emissions
Unit(s) ID	(LB/HR)	(LB/HR)	(%)	(%)	(LB/HR)	(ton/yr)
CP1 - CP3/HL1	0.36	0	99.0%	0.0%	0.3564	1.561032
FW4	0.84	0	99.0%	0.0%	0.8316	3.642408
FCG1	0.03125	0	99.0%	0.0%	0.0309375	0.13550625

^{*} acetone is used as the cleaner

METHODOLOGY

VOC emissions (tons/year) = release agent use rate (lb/hr) * release agent VOC % (%) * 8760 operating hours/year * 2000 lb/ton

Appendix A: Emissions Calculations Particulate From Fiberglass Manufacturing operations

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr.,Plymouth, IN 46563

Part 70 Permit: 099-7547-00043

Reviewer: ERG/BS Date: 08.29.00

Uncontrolled Potential PM Emissions (calculated by ERG)

	use rate	% solids	transfer efficiency*	emission factor**	PM emissions	PM emissions
Unit(s) ID	(lb/hr)	(%)	(%)	(lb PM/lb)	(lb/hr)	(ton/yr)
CP1 - CP3/HL1	720	65.0%	100.0%	-	0	0
FW4	111.32	-	100.0%	-	0	0
FWSH1-3/CPC4	212.8	65.0%	80.0%	-	27.664	121.16832
FWSH4-6	638.4	65.0%	80.0%	-	82.992	363.50496
CB1/CB2	4160	-	-	0.003	12.48	54.6624
G1	63.1	63.2%	80.0%	-	7.97584	34.9341792
FCG1	43.1	67.3%	80.0%	-	5.80126	25.4095188
FCR1	25	65.0%	100.0%	-	0	0

^{*}The transfer efficiency was arrived at considering the type of coating used, gun type, spray direction, engineering judgement, and baseline transfer efficiency chart of spray coating methods. Eighty percent (80%) was selected for operations using Air-Assisted Airless guns, and one hundred percent (100%) for flowcoating operations.

Potential PM Emissions (tons/yr)= Process rate (lb/hr) * % solids (%) * (1-transfer efficiency) (%) *8760 (hrs/year) * (1/2000) (tons/lb) OR (in the case of the hand grinding operations where an emission factor was provided resulting from mass balance studies) Potential PM Emissions (tons/yr)= Process rate (lb/hr) * emission factor (lb PM/lb) * 8760 (hrs/yr) * 1/2000 (tons/lb)

^{**} In the case of units CB1/CB2, the emission factor used was provided by the facility based on mass balances. METHODOLOGY

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Appendix A: Emissions Calculations VOC and Particulate From Surface Coating and Other Solvent Operations

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr.,Plymouth, IN 46563

Part 70 Permit: 099-7547-00043

Reviewer: ERG/BS Date: 08.29.00

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour		Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
PB1 (paint booth)															
Black enamel	7.67	45.2%	0.0%	45.2%	0.0%	50.5%	0.11	6.00	3.47	3.47	2.29	10.02	6.68	6.87	45%
FT1 (pipe fittings and touch up)															
Oatey Primer**	6.58	88.0%	0.0%	88.0%	0.0%	0.0%	0.01	2.35	5.79	5.79	0.14	0.60	0.00	0.00	100%
Oatey Medium Cement**	7.83	85.0%	0.0%	85.0%	0.0%	0.0%	0.02	2.35	6.66	6.66	0.31	1.37	0.00	0.00	100%
Oatey Heavy Duty Cement**	7.82	73.0%	0.0%	73.0%	0.0%	0.0%	0.004	2.35	5.71	5.71	0.05	0.24	0.00	0.00	100%

^{*} Black enamel use will account for green enamel use since the two types of paint are very similiar and the black has a higher content of VOCs and HAPs

State Potential Emissions Add worst case coating to all solvents 2.29 12.22 6.68

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

^{**} Primer and Adhesive applications are conducted with a bucket and brush so PM emissions are zero.

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Appendix A: Emissions Calculations HAP Calculations From Surface Coating Operations

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr., Plymouth, IN 46563

Part 70 Permit: 099-7547-00043

Reviewer: ERG/BS Date: 08.29.00

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % MEK	Weight % Ethylbenzene	MEK Emissions (ton/yr)	Xylene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)
PB1 (paint booth)									
Black enamel	7.67	0.11	6.00	11.00%	0.00%	2.00%	0.00	2.44	0.44
FT1 (pipe fit and touch up)									
Oatey Primer	6.58	0.01	2.35	0.00%	80.00%	0.00%	0.54	0.00	0.00
Oatey Medium Cement	7.83	0.02	2.35	0.00%	40.00%	0.00%	0.64	0.00	0.00
Oatey Heavy Duty Cement	7.82	0.004	2.35	0.00%	5.00%	0.00%	0.02	0.00	0.00

Total State Potential Emissions 1.20 2.44 0.44

METHODOLOGY

HAP emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emission Calculations Abrasive Blasting - Confined

Company Name: AK Industries, Inc./Romar Inc.
Address City IN Zip: 2055 Pidco Dr.,Plymouth, IN 46563

part 70 permit: 099-7547-00043 Reviewer: ERG/BS Date: 08.29.00

Unit CB2

Table 1 - Emission Factors for Abrasives

Emission Factor								
Abrasive Ib PM / Ib abrasive Ib PM10 / Ib F								
Sand	0.041	0.70						
Grit	0.010	0.70						
Steel Shot	0.004	0.86						
Other	0.010							

Table 2 - Density of Abrasives (lb/ft3)

Abrasive	Density (lb/ft3)
Al oxides	160
Sand	99
Steel	487

Table 3 - Sand Flow Rate (FR1) Through Nozzle (lb/hr)

Flow rate of Sand Through a Blasting Nozzle as a Function of Nozzle pressure and Internal Diameter

	Nozzle Pressure (psig)							
Internal diameter, in	30	40	50	60	70	80	90	100
1/8	28	35	42	49	55	63	70	77
3/16	65	80	94	107	122	135	149	165
1/4	109	138	168	195	221	255	280	309
5/16	205	247	292	354	377	420	462	507
3/8	285	355	417	477	540	600	657	720
7/16	385	472	560	645	755	820	905	940
1/2	503	615	725	835	945	1050	1160	1265
5/8	820	990	1170	1336	1510	1680	1850	2030
3/4	1140	1420	1670	1915	2160	2400	2630	2880
1	2030	2460	2900	3340	3780	4200	4640	5060

Calculations

Adjusting Flow Rates for Different Abrasives and Nozzle Diameters

Flow Rate (FR) = Abrasive flow rate (lb/hr) with internal nozzle diameter (ID)

FR1 = Sand flow rate (lb/hr) with internal nozzle diameter (lD1) From Table 3 =

D = Density of abrasive (lb/ft3) From Source =

D1 = Density of sand (lb/ft3) =

ID = Actual nozzle internal diameter (in) =

ID1 = Nozzle internal diameter (in) from Table 3 =

I	77
I	168
	99
I	0.156
I	0.125
	· ·

Flow Rate (FR) (lb/hr) = 203.514 per nozzle

Uncontrolled Emissions (E, lb/hr)

EF = emission factor (lb PM/ lb abrasive) From Table 1 =

FR = Flow Rate (lb/hr) =

w = fraction of time of wet blasting =

N = number of nozzles =

0.027	
203.514	
0	%
1	

	Uncontrolled Emissions =	5.49 lb/hr
Unit CB2		24.07 ton/yr

METHODOLOGY

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Ton/yr = Ib/hr X 8760 hr/yr X ton/2000 lbs

Flow Rate (FR) (lb/hr) = FR1 x (lD/lD1)2 x (D/D1)

 $E = EF \times FR \times (1-w/200) \times N$

w should be entered in as a whole number (if w is 50%, enter 50)